

Emergency Obstetric Hysterectomy: A study of 26 cases over a period of 5 years

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OBJECTIVES - To study the cases of obstetric hysterectomy over a 5-year period (June 1996-May 2001) in a teaching hospital to determine the incidence, indications and associated complications with a view to suggest ways of improving outcome. **METHOD** - Twenty-six obstetric hysterectomies performed during the study period were analyzed. **RESULTS** - During the study period there were 26 cases of obstetric hysterectomy out of 33371 deliveries giving an incidence of 0.0779%. The incidence of hysterectomy following vaginal delivery was 0.0106% and that of cesarean hysterectomy was 0.39%. Majority of the patients were unbooked (76.9%) and were in the age group of 26-35 years (65%). Common parity group was parity 3 and 4. Morbid adherence of placenta was the commonest indication contributing to 26% (7/26) of the cases. There was no maternal death in the study. **CONCLUSION**- Emergency obstetric hysterectomy is a rare operation (1 in 1284 deliveries). In spite of intra-operative risk and possible post-operative complications, it remains a potentially life-saving procedure.

Key words: obstetric hysterectomy, morbidly adherent placenta, placenta previa, rupture uterus

Introduction

The operation of obstetric hysterectomy was originally devised more than 200 years ago as a surgical attempt to manage life threatening obstetric hemorrhage and infection. Newer drugs like prostaglandins, better antibiotics and availability of blood transfusion have brought down the incidence of obstetric hysterectomy. But obstetric hysterectomy is still a last resort to save a mother's life. The decision is often made when the condition of the patient is too critical. Proper timing and meticulous care may reduce or prevent maternal complications.

Material and methods

Twenty-six cases of obstetric hysterectomy performed over a period of 5 years from June 1996 to May 2001 were studied and analyzed with special emphasis on indications and maternal outcome.

Results

There were 26 cases of emergency hysterectomy in 33371 deliveries during the period of 5 years giving an incidence of 0.0779% (Table I). Twenty cases were unbooked (76.9%) and only six cases (23%) were

booked. Majority of the cases (65%) were in the age group of 26-35 years (Table II). The youngest was 22 years old and the oldest was 39. Fifty-seven percent belonged to parity 3 and 4 together and 19.1% to parity 5.

Table III, gives the indications for hysterectomy. Seven cases of morbidly adherent placenta required hysterectomy. Previous cesarean section accounted for five (71.4%) of these cases. Out of seven cases, five were following cesarean section and three of them were associated with major degree of placenta previa. Out of the six cases of ruptured uterus three were due to obstructed labor, two due to injudicious use of oxytocin and one due to scar dehiscence. There were five cases of atonic PPH, four following cesarean section and one following vaginal delivery. All the atonic PPH cases had prolonged labor mismanaged at home. There were three cases of placenta previa with the placental bed bleeding profusely needing emergency hysterectomy. Three cases of uterine perforation underwent hysterectomy in early pregnancy due to multiple injuries at the fundus and lateral wall of the uterus during voluntary termination of pregnancy (MTP). In two cases, hysterectomy was done for extension of the uterine incision producing broad ligament hematoma leading to deterioration of the general condition and derangement of the anatomy making it difficult to identify internal iliac artery.

Postoperative complications were pyrexia in ten, paralytic ileus in three, peritonitis in two and vesico-vaginal fistula in one. Of the 10 cases of post-operative pyrexia paralytic ileus developed in three.

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Table I. Incidence of obstetric hysterectomy

Statistical data	Number
No. of deliveries	33371
No. of cesarean section	5107
No. of obstetric hysterectomy	26
Incidence of obstetric hysterectomy	0.0779 %
Incidence of obstetric hysterectomy following vaginal delivery	0.0106 %
Incidence of obstetric hysterectomy following cesarean section	0.39 %

Table II. Distribution of the cases by age and parity

Age years	Parity						Total
	1	2	3	4	5		
20-25	1	1	2				4
26-30		2	3	2	1		8
31-35		1	2	3	3		9
36-40		1	2	1	1		5
Total	1	5	9	6	5		26

Table III. Indications for obstetric hysterectomy (n=26)

Indication	Number	Percentage
Morbidly adherent placenta	7	26.9
Post-cesarean	5	
With placenta previa	3	
Without placenta previa	2	
Placenta previa	1	
History of manual removal of placenta	1	
Rupture uterus	6	23
Obstructed labour	3	
Oxytocin abuse	2	
Dehiscence of cesarean scar	1	
Atonic PPH	5	19.2
Cesarean section for prolonged labor	4	
Vaginal delivery following prolonged labor	1	
PPH do to placenta previa	3	11
Perforation during termination of pregnancy (MTP)	3	11
Extension of uterine wound incision	2	7.6

We performed subtotal hysterectomy in 20 cases as the operation was done in moribund condition of the patient. In the remaining six cases who had excessive bleeding from the placental bed of low lying placenta, total hysterectomy was done.

Discussion

The incidence of emergency obstetric hysterectomy in our study is 0.0779 % which is similar to that of Sturdee and Rushton (0.05 %) and Chew and Biswas (0.0392%). But Gupta et al³ reported an incidence of 0.26%, Kore et al⁴ 0.18% and AMBIYE et al⁵ 0.12%. We found a lower incidence of 0.0779% than reported by these Indian authors⁶. It may be due to the fact that most of our deliveries are conducted in the hospital following regular ante-natal check-up.

In our study the incidence of emergency hysterectomy following vaginal delivery is 0.0106% and that of cesarean hysterectomy is 0.39%. These are comparable to 0.033% and 0.45% respectively reported by Pawar and Shrotri⁷.

The incidence of morbid adhesion of placenta is 1 in 4910 deliveries (7/33371), which corresponds to 1 in 4220 deliveries (6/25323) reported by Pal and Roy Chowdhury⁸ but is lower than 1 in 1375 deliveries (17/23375) reported by Prabhjot and Wadia⁹, Ruptured uterus is the second commonest indication in our study accounting for 23% (6/26) of the cases. This is almost similar to 20% (10/50) reported by Allahabadia and Vaidya¹⁰, In our series, 19.2% (5/26) of the cases were due to atonic PPH which is similar to 16% (8/50) reported by Allahabadia and Vaidya¹⁰. In our study there was no maternal death. Sturdee and Rushton¹ also had no maternal death. But other Indian authors give the maternal mortality rates of 9.3% (10/106)⁵, 32% (26/50)⁹ and 6.01% (11/183)¹⁰.

In performing emergency obstetric hysterectomy, subtotal hysterectomy is often done because of the time factor as the quicker the operation is completed the better the outcome in a moribund patient. But in case of placenta previa, total hysterectomy is usually required to remove the placental bed in the lower segment.

One of our cases, referred from the periphery, developed vesico-vaginal fistula on 9th postoperative day after subtotal hysterectomy done for ruptured uterus following prolonged obstructed labor. This must be the result of ischemic necrosis caused by the prolonged obstructed labor.

Though obstetric hysterectomy is a rare operation (1 in 1284 deliveries) it represents a painful dilemma in obstetric practice. As a method of treatment it is a radical procedure though it has a definite role in the management of life threatening obstetric hemorrhage or ruptured uterus. Emergency hysterectomy, is a last resort to save the life of the mother though at the cost of her reproductive capability.

With newer drugs like prostaglandins and antibiotics, easy availability of blood transfusion, good maternal care, modern policy of active management of labor, early recognition of complications, and timely performance of cesarean section to avoid difficult vaginal delivery obstetric hysterectomy should become a rarer procedure. Ligation of uterine or internal iliac arteries can also avoid some of the obstetric hysterectomies necessitated by severe uncontrollable postpartum hemorrhage.

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